



COCAMS/NWA

Newsletter



Volume 1 Issue 2

December 1998

AMS ANNUAL MEETING IN DALLAS

Message from COCAMS/NWA President

Chapter Members,

It's almost time for the American Meteorological Society Annual Meeting! The Central Oklahoma Chapter will be well represented at January's meeting in Dallas, TX. In addition to our Chapter's poster display in the Exhibit Hall, many Chapter members will be presenting their research and service activities in oral or poster presentations. There also will be a large set of booths in the Exhibit Hall displaying technologies developed and applied by members of the Oklahoma Weather Center. This year the Norman Economic Development Commission and the Norman Chamber of Commerce will host a Norman gathering on the evening of January 12, 5-7 PM at the Wyndham Anatole Hotel. Everyone is invited to nibble on hors d'oeuvres and talk with old friends. Bring your business associates to learn about the opportunities Norman has to offer the weather community. I hope to see you there!

Renee McPherson, President
COCAMS/NWA

50th Anniversary of the First Tornado Forecast Souvenirs

Some 50th Tornado Anniversary souvenirs remain. There are several large (natural color) and XXL (ash and natural colors) shirts remaining. Prices are \$12 for large and \$14 for XXL. Please contact Bill Conway at NSSL (405) 366-0461, email conway@nssl.noaa.gov, for ordering information.

In Memoriam, Colonel Robert C. Miller

Colonel Robert C. Miller died 13 September 1998 in Laurel, Maryland. Col. Miller along with the late Ernest Fawbush were honored in March at the celebration here in central Oklahoma of the 50th Anniversary of the First Tornado Forecast.

NWA Annual Meeting

The 23rd annual meeting of the National Weather Association was held at the Westin Oklahoma City Hotel and Conference Center, (One North Broadway) on October 18- 23.

In this issue...

Message from COCAMS/NWA President	1
50th Anniversary of the First Tornado Forecast Souvenirs	1
In Memoriam, Colonel Robert C. Miller	1
NWA Annual Meeting	1
News from the Oklahoma Climatological Survey .	2
News from the School of Meteorology	2
News from the Center for Analysis and Prediction of Storms	2
Treasurer's Report	3
COCAMS/NWA Meeting Minutes	4
Message from the Editor	4

COCAMS/NWA Officers

President	Renee McPherson	325-2541
Vice-President	John Snow	325-3101
Secretary	Joe Baalke	366-6560
Treasurer	Paul Janish	579-0719

News from the Oklahoma Climatological Survey

The Oklahoma Climatological Survey (OCS) is receiving support from the National Weather Service (NWS) to implement a prototype data dissemination system for emergency managers. Since 1996, OCS has been working to better equip public safety officials with information when weather-impacted emergencies occur. This project, known as OK-FIRST, has trained over 65 local officials how to access and interpret real-time weather data, including data from 15 regional NEXRAD units plus information from the Oklahoma Mesonet.

The new support from the NWS comes as the result of the FY1999 Federal budget. Congress instructed the NWS to support OK-FIRST and to help transition the system to become a national prototype. Current plans call for the OCS, the NWS, and the National Severe Storms Laboratory (NSSL) to jointly participate in the development of the prototype system.

The prototype system will be designed to complement and enhance the new Local Data Acquisition and Dissemination (LDAD) systems that are now being deployed at the Norman and Tulsa NWS offices. It is envisioned that local emergency managers will use the new system to obtain data from the NWS. LDAD will link AWIPS with the prototype system and OK-FIRST. Emergency managers will receive weather data from the prototype system and visualize the data using Internet browser "plug-in" software developed by OCS. Involvement by NSSL will allow emergency managers to receive and help evaluate experimental AWIPS products. In addition, OCS will prepare documentation that will aid other NWS offices around the country to develop similar systems as they receive LDAD capability.

News from the School of Meteorology

This fall the Oklahoma University School of Meteorology has a total of 254 undergraduates and 80 graduate students. The introductory orientation course (METR 1111) has about 125 students of which 90 are entering freshman. About 65% of these students are out-of-state, which is typical of all our classes. The number of states represented is 31. Almost 40% of the freshmen are female. Among the 85 or so that reported ACT scores, 65% of them had a composite ACT of 26 or higher. The School was able to award 14 freshman scholarships this year.

Gavin Esenberg of the School of Meteorology was selected the Outstanding Senior of the College of Geosciences for the 1998-99 academic year. He was presented his award by President Boren at a ceremony on Friday, October 30, 1998, at the Oklahoma Memorial Union and was also honored during the OU football game the next day on Owen Field.

News from the Center for Analysis and Prediction of Storms

The government of South Korea has been testing the CAPS Advanced Regional Prediction System (ARPS) and will formally commission it as their national operational model in summer, 1999. Taiwan, Thailand, and Japan are also either testing the ARPS or considering doing so. The FAA has begun to fund CAPS again to conduct comparisons between its numerical forecasts and those generated from statistical systems such as the Growth and Decay Tracker. During the AMS Annual Meeting in January, 1999, CAPS will be displaying its realtime forecasts on kiosks throughout the conference center. The daily predictions will consist of 5-6 ensembles over the continental US, along with 8 km central US and 4 km regional domains. The forecasts will also be used in the daily weather briefings. For more information on CAPS, please visit <http://www.caps.ou.edu>.

The First Study Conference on Aviation Weather Hazards

A 2-day workshop was held in October on the campus of KU in Lawrence to discuss the major weather-related aviation hazards and to identify feasible means, through operational policy and technological applications, of minimizing their effects. Another purpose of the workshop was to encourage collaboration among the university research community, industry, and the federal agencies such as NASA, FAA, and NOAA. The workshop was organized by the Aviation Weather Center in Kansas City, KU Dept. of Physics & Astronomy, as well as CAPS from OU and was co-sponsored by NOAA/NWS, the FAA, the US Weather Research Program, and the NSF EPSCoR offices of OU and KU.

Representatives from United, American, Northwest, and UPS iterated the top meteorological hazards to their operations: turbulence, icing, volcanic ash, convective weather, and visibility. Researchers from U. of WI, CSU, OU, KU, Penn. State and NCAR shared their work in

numerical modeling, microphysical processes, remote sensing, and diagnostic and statistical algorithms to forecast icing, turbulence, and convection growth and decay. Individuals from the AWC, the Air Force Weather Agency, and the Alaska Aviation Experimental Forecast Facility described their means of creating and disseminating weather forecast products and current initiatives for continued improvement in their service to the aviation community.

Several key science issues were collectively identified including the fundamental dynamics of turbulence (clear-air and convection-induced), the short-term predictability of storm-scale weather using either full dynamic models or statistical techniques, the assimilation of high resolution observational data (radar, lightning, satellite, commercial aircraft) into numerical models. In addition there was considerable dialogue regarding the need for a mechanism to involve universities in research initiatives of the federal agencies, and in particular the FAA.

CAPS Participation at the AMS Annual Meeting

The American Meteorological Society (AMS) annual meeting will be held in Dallas on 10-15 January, 1999. CAPS and Hub-CAPS will have a significant presence at this year's event. CAPS is partnering with Cray/Silicon Graphics to display realtime forecasts on four kiosks throughout the hotel and conference areas. Both ARPS and ADAS will be used at the daily weather briefings. A paper titled, "Storm-scale Numerical Weather Prediction for Commercial and Military Aviation. Part I: Results from Operational Tests in 1998" has been submitted for presentation at the AMS 8th Conference on Aviation, Range, and Aerospace Meteorology. The paper is now posted at <http://hubcaps.ou.edu/papers/avwx99/>

On Tuesday night there will be a tour of the AAWS. CAPS will also have a booth displaying several products from the Hub-CAPS web page. While at the conference, be sure to stop by the booth!

Project CRAFT (Collaborative Radar Acquisition and Field Test)

CAPS recently received \$210K from the Oklahoma State Regents for Higher Education to bolster its realtime numerical prediction efforts, and to establish realtime Level II data feeds to the NEXRAD radars at Oklahoma City, Tulsa, Fort Smith, Wichita, Dodge City, Amarillo, Lubbock, and Fort Worth. CAPS will use these data in its numerical forecasts, and the NSSL will incorporate them into their Warning Decision Support System (WDSS). The 8-radar acquisition testbed, part of a project known as the

Collaborative Radar Acquisition Field Test (CRAFT) that involves CAPS, NSSL, OSF, UCAR, the OU School of Meteorology, and the University of Washington, is hoped to serve as a national prototype. Additionally, efforts are underway to link the testbed with the NCDC so that the Level II data can be more efficiently archived, thus reducing the cost and time required for access by the research community.

The original goal of CAPS and Hub-CAPS was to use the so-called wide band or Level II NEXRAD data to initialize storm-resolving models. Current access is only to NIDS data, which provide the lowest 4 tilts at binned-value resolution. NIDS severely limits the ability to capture the structure of existing storms, and thus in the absence of a national strategy to provide real time access to Level II data. CAPS has teamed with UCAR, the University of Washington, and the Oklahoma State Regents for Higher Education to establish a real time Level II acquisition test bed in the southern Great Plains. Radars to be used include Oklahoma City, Tulsa, Fort Smith, Wichita, Dodge City, Amarillo, Lubbock, and Fort Worth. The first test was conducted on 10 September using the OKC radar. The Fort Worth system should be up and running in a few weeks. The goal is to be using Level II data from several of these radars by late winter, and from all by next spring. This should improve substantially the quality of the forecasts. For more information on CRAFT, see <http://www.caps.ou.edu/CAPS/craft.html>.

Treasurer's Report

Financial Report

Treasurer's Report -

Given at the 2 November 1998 Meeting:

Account Balance 10/20/98 Mtg:	\$5422.00
Petty Cash 10/20/98 Mtg:	\$ 27.00

Total Available Funds 10/20/98:	\$5449.00
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Expenditures (10/20 - 11/2/98):	\$ 49.24
Income (10/20 - 11/2/98):	\$ 0.00

Total Available Funds 11/2/98:	\$ 5399.76
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Treasurer's Report -

To be Given at December Meeting:

Expenditures (10/20 - 11/2/98):	\$ 181.66
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Income (10/20 - 11/2/98): \$ 764.00

 Total Available Funds 11/18/98: \$5982.10

Membership Report

1998-1999 Members	87
Dues paid	43
OUSCAMS affiliates	44

COCAMS/NWA Meeting Minutes

Meeting on November 2, 1998

The Central Oklahoma Chapters of the American Meteorological Society and the National Weather Association met in Room A235 of Sarkeys Energy Center on the University of Oklahoma campus. In attendance were 61 members and guests. Social period with refreshments was from 7:00 - 7:20 pm. Renee McPherson, President, welcomed everyone and called the meeting to order at 7:20 pm. Joe Baalke, Secretary, read the minutes from the October 20, 1998, meeting. Paul Janish, Treasurer, read the treasurers report stating that COCAMS/NWA has a current balance of \$5399.76. Dues were collected, by Paul, both before and after the meeting. COCAMS/NWA has 75 members, 40 paying and 35 student. Last years membership was 88. Paul also mentioned the COCAMS/NWA Scholarship and stated that we had enough volunteers to form a sub-committee. The sub-committee will be limited to 5 members including one representative from the faculty and one student representative. A meeting will be held, within the month, by the Executive Committee to choose the sub-committee membership.

Kit Wagner, Past President, circulated a sign up sheet for those who wanted to volunteer to be science fair judges. Kit mentioned that he still had extra copies of the

COCAMS/NWA News Letter, and asked for input for the next edition.

Dr. Fred Carr, Chairman of the School of Meteorology, University of Oklahoma, introduced Kerry A. Emanuel, Professor of Meteorology, Massachusetts Institute of Technology, who's presentation was "Hypercanes: The Black Holes of Meteorology". Dr. Emanuel started his presentation off by stating that he was going to talk to the group about science fiction, things that might occur. He presented various charts and graphs that showed what could happen under extreme atmospheric conditions. Has a Hypercane ever occurred? Dr. Emanuel said there is no proof, as of yet, that such conditions ever happened. However, a major event like an asteroid collision with the Earth may be what it would take to set off the necessary conditions for a Hypercane. A Q&A session followed the presentation. Renee presented the speaker with a gift.

Next month's meeting will occur between Thanksgiving and Christmas, location to be decided. Possible presentation on the October 4th tornadoes by staff from WFO Norman.

The meeting was adjourned at 8:20 pm.

Joe Baalke, Secretary.

Message from the Editor

This COCAMS/NWA Newsletter will be published periodically to disseminate information about our AMS and NWA local chapters and their members. As the newsletter editor, I will be soliciting news items from you from time to time. Please give me a call if you have news items or ideas for publication topics.

Kit Wagner, Editor.
 (405) 329-8707

CALENDAR

December 3, 1998	COCAMS/NWA Monthly Meeting - October 4, 1998, Tornado Outbreak
January 19 or 20, 1999	COCAMS/NWA Monthly Meeting - Severe Weather in Australia - Dr. Lance Leslie

The COCAMS/NWA Newsletter is published jointly by the Central Oklahoma Chapter of the American Meteorological Society and the Central Oklahoma Chapter of the National Weather Association.

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